

In the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Previously Presented) Miniaturized gas chromatograph comprising at least one injector (1), one separation column (2) and a detector (3) wherein the injector (1), the separation column (2) and the detector (3) are combined on a circuit board (4) to give a gas chromatography module (5), and the injector (1) comprises a first sheet (6) with channels (12) and a second sheet (7) with channels (13) wherein the sheets may be displaced relative to each other, whereby at least one of the sheets (6, 7) is provided with a layer (8) of plastic on the side of the sheet facing the other sheet (7, 6), wherein the layer (8) of plastic is a plasma polymerized layer.

2. (Previously Presented) Miniaturized gas chromatograph pursuant to claim 1, wherein the plastic is chemically inert.

3. (Canceled)

4. (Currently Amended) Miniaturized gas chromatograph pursuant to claim 1, wherein the layer is a plasma polymerized layer of organic monomers selected from difluoromethane, hexafluorobutadiene, ~~and/or~~ octafluorocyclobutane.

5. (Previously Presented) Miniaturized gas chromatograph pursuant to claim 1, wherein the sheets (6, 7) are made of silicon.

6. (Previously Presented) Miniaturized gas chromatograph pursuant to claim 1, wherein the plastic has a lower coefficient of static friction than silicon.

7. (Previously Presented) Miniaturized gas chromatograph pursuant to claim 1, further comprising a control and evaluation unit (9) provided on the circuit board (4).

8. (Previously Presented) Miniaturized gas chromatograph pursuant to claim 1, further comprising at least one heating element (10) configured such that one or more of the injector (1), the separation column (2) and/or the detector (3) can be temperature-controlled.

9. (Previously Presented) Miniaturized gas chromatograph pursuant to claim 8, wherein at least one heating element (10) comprises ceramic plates with heating elements made via thick film technology.

10. (Previously Presented) Miniaturized gas chromatograph pursuant to claim 8 comprising an electronic control and evaluation unit placed on the circuit board and a plurality of recesses (15, 23, 24) provided in the circuit board (4) such that the electronic control and evaluation unit (9) is protected from the heat emitted by the heating elements (10).

11. (Previously Presented) Miniaturized gas chromatograph pursuant to claim 1, wherein the second sheet (7) is covered by a cover sheet (11).

12. (Previously Presented) Miniaturized gas chromatograph pursuant to claim 1, wherein the first sheet (6) comprises at least three channels (12), and the second sheet (7) comprises at least two supply channels (13) and two discharge channels (14).

13. (Previously Presented) Miniaturized gas chromatograph pursuant to claim 1, further comprising a plurality of recesses (16) provided in the circuit board into which a plurality of capillaries (18) are countersunk for the gas flow.

14-17. (Canceled)

18. (Previously Presented) Miniaturized injector for a miniaturized gas chromatograph, the injector (1) comprising a first sheet (6) with channels (12), and a second sheet (7) with channels (13)

wherein the sheets may be displaced relative to each other, whereby at least one of the sheets (6, 7) is provided with a layer (8) of plastic on the side of the sheet facing the other sheet (6,7) wherein the layer (8) of plastic is a plasma polymerized layer.

19. (Previously Presented) Injector pursuant to claim 18, wherein the plastic is chemically inert.

20. (Canceled)

21. (Currently Amended) Injector pursuant to ~~claim 20~~ claim 18, wherein the layer is a plasma polymerized layer made of organic monomers selected from difluoromethane, hexafluorobutadiene, ~~and/or~~ octafluorocyclobutane.

22. (Previously Presented) Injector pursuant to claim 18, wherein the plastic has a lower coefficient of static friction than silicon.

23. (Previously Presented) Injector pursuant to claim 18 wherein the second sheet (7) is covered by a cover sheet (11).

24-26. (Canceled)

27. (Previously Presented) Miniaturized gas chromatograph comprising at least one injector (1), one separation column (2), and a detector (3) wherein the injector (1), the separation column (2), and the detector (3) are combined on a circuit board (4) to give a gas chromatography module (5), and the injector (1) comprises a first sheet (6) with channels (12) and a second sheet (7) with channels (13) wherein the sheets may be displaced relative to each other, and comprising at least one heating element (10) configured such that one or more of the injector (1), the separation column (2), and/or the detector (3) can be temperature-controlled, and further comprising an electronic control and evaluation unit placed on the circuit board and a plurality of recesses (15, 23, 24) provided in the

circuit board (4) such that the electronic control and evaluation unit (9) is protected from the heat emitted by the heating elements (10).

28. (Previously Presented) Miniaturized gas chromatograph pursuant to claim 27, wherein the recesses are depressions inserted into the surface of the circuit board.